RTIP ID# 34770 (Final 2008 RTIP)

TCWG Consideration Date: September 23, 2008

Project Description (clearly describe project)

The County of San Bernardino, in cooperation with the California Department of Transportation and the Federal Highway Administration, is proposing to realign and widen a 12.9-mile segment of State Route 58 (SR-58) between the Kern County/San Bernardino Line and a point that is approximately 7.5 miles east of United States Route 395 (US-395) from a 2 lane conventional highway to a four lane Expressway; and construct a railroad grade separation and interchange at the SR-58/US-395 Junction. Three Build Alternatives, as well as the No-Build Alternative, are being considered to carry out the proposed project. Project location is illustrated in Figures 1 and 2 (attached).

Alternative 1: No-Build

The No-Build Alternative would maintain the facility in its present condition. Under this alternative, the capacity of SR-58 would remain the same as current conditions. SR-58 is currently operating at LOS D/E, and without improvements is forecasted to operate at LOS F by the year 2040. Continuing local development and increasing traffic volumes will add to traffic delay and inconvenience. This alternative fails to address the problems identified within this segment of SR-58.

Alternative 2: Realign and Widen to 4-Lane Expressway on a Northerly Alignment

This alternative would realign existing SR-58 from the San Bernardino/Kem County Line to approximately PM 8.1. The new alignment would run roughly parallel to and 0.2 miles to the north of existing SR-58. Existing SR-58 from PM 8.1 to PM 12.9 would be widened to a 4-lane expressway. A partial cloverleaf interchange is being proposed at the new SR-58/SR-395 interchange. A grade separation structure is being proposed at the railroad crossing at approximately PM 8.0. There would be no at-grade crossings within the limits of the project. The proposed typical section would consist of a 90-foot median width graded to accommodate future widening, two 12-foot lanes in each direction, 5-foot inside shoulders, 10-foot outside shoulders, and 4:1 or flatter side slopes.

Alternative 3: Realign and Widen to 4-Lane Expressway on the Existing Alignment

This alternative would closely follow the existing alignment; however, it would run parallel to, and just southerly of the existing alignment. A segment on the west end would be realigned and a grade separation structure to cross the railroad is proposed. A partial cloverleaf interchange is recommended at the new SR-58/SR-395 interchange. A lengthy structure would be constructed on SR-395 to span SR-58 and the railroad. The existing intersection with Twenty-Mule Team Road would also be reconstructed. The right-of-way requirements for this alternative necessitate the purchase and removal of majority, if not all, of the businesses that exist at Kramer Junction. This would include at least four gas stations that employ underground storage tanks. Additionally, this alternative would require the relocation of a Southern California Edison electrical substation and its power line infrastructure. Furthermore, the proximity of the railroad to the north side of SR-58 at Kramer Junction would make the construction of an interchange at this location very difficult as well as expensive.

The proposed typical section would consist of a 90-foot wide median graded to accommodate future widening, two 12-foot lanes in each direction, 5-foot inside shoulders, I0-foot outside shoulders, and 4:1 or flatter side slopes. A minimum right of way of 400 feet width would be acquired.

Alternative 4: Realign and Widen to 4-Lane Expressway on a Southerly Alignment

This alternative would leave the existing alignment where it turns south at approximately PM 0.3 and continue to run southeast. When SR-58 approaches the railroad, a grade separation structure is being proposed to cross the railroad. Under this alternative, the roadway would run roughly parallel to and approximately 0.5-mile southerly of existing SR-58 to approximately PM 9.3 where it would rejoin existing SR-58. The remaining portion PM 9.3 to PM 12.9 would be widened to a 4-lane expressway. A partial cloverleaf interchange is recommended at the new SR-58/SR-395 interchange. The existing intersection with Twenty-Mule Team Road would also be reconstructed. There would be no at-grade crossings within the limits of the project.

The proposed typical section would consist of a 90-foot wide median graded to accommodate future widening, two 12-foot lanes in each direction, 5-foot inside shoulders, 10-foot outside shoulders, and 4:1, or flatter side slopes. A minimum right of way of 400 feet width would be acquired.

Type of Project (use Table 1 on instruction sheet) Change to existing state highway; Roadway realignment										
County San Bernardino	Narrative Location/Route & Postmiles: SR-58 PM R-0.0/12.9 Caltrans Projects – EA# 347700									
Lead Agency: C	Lead Agency: Caltrans									
Contact Person Tony Louka		Phone# 909-383-6385		Fax# 909-383-5975			Email tony_louka@dot.ca.gov			
Hot Spot Pollutant of Concern (check one or both) PM2.5 PM10 √										
Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)										
Fyclusion I ./		EA or Draft EIS	Oraft FOI Fina		PS&E (Constr		or Other truction		Other	
Scheduled Date of Federal Action:										
NEPA Delegation – Project Type (check appropriate box)										
Excluded			Section 6004 – NEPA Categorical Exclusions (CEs)			Section 6005 – All NEPA document types (i.e. CEs, EAs, EIS)				
Current Programming Dates as appropriate										
	PE/Er	E/Environmental		ENG		ROW			CON	
Start										
End										

Project Purpose and Need (Summary): (attach additional sheets as necessary)

SR-58 carries interstate and interregional travelers and a high volume of interstate truck traffic transporting agricultural and commercial commodities significant to the State and regional economy. The route is part of the Interregional Road System (IRRS) and classified as a High Emphasis, Focus route with a minimum facility standard of 4-lane expressway. This segment of SR-58 is a nonstandard 2-lane "reach" between a 4-lane divided freeway to the west and a 4-lane divided expressway to the east. This segment also contains an at-grade railroad crossing and a signalized intersection that slows traffic. The existing 2-lane conventional highway has insufficient capacity to efficiently handle present and future travel demands. There are no alternative parallel routes for travel.

The proposed project would close the gap in lane continuity by widening and realigning this segment of SR-58 to a 4-lane expressway. An interchange is proposed where SR-58 crosses SR-395 and a grade separation structure would be constructed where SR-58 crosses the railroad.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

The existing land uses in the vicinity of the proposed project are predominantly rural residential, with some commercial and utility/maintenance land uses. Within the immediate vicinity of Kramer Junction (i.e., SR-58/SR-395 junction) there is a highway maintenance station, a sludge pond, and an electric substation. West of Kramer Junction to the western extent of the proposed project there are rural residential uses, a private air field, a chicken farm, a water storage tower, a solar panel facility, and vacant land. East of Kramer Junction to the eastern extent of the proposed project there are rural residential uses, a natural gas metering station, an exposed section of natural gas pipeline, and vacant land. Parallel to the current alignment and north of SR-58 there are the Burlington Northern and Santa Fe railroad tracks.

Traffic Data/Roadway Segment	No Build Forecast (2016)	Build Alternatives Forecast (2016)
PM 0.00 to PM 5.40		
Average Daily Traffic (ADT)	17,400	17,400
Truck ADT	8,526	8,526
Percent Truck Traffic in ADT	49	49
Level of Service (LOS)	Е	Α
PM 5.40 to PM 12.90		
Average Daily Traffic (ADT)	14,500	14,500
Truck ADT	5,655	5,655
Percent Truck Traffic in ADT	39	39
Level of Service (LOS)	Е	Α

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Traffic Data/Roadway Segment	No Build Forecast (2040)	Build Alternatives Forecast (2040)
DM 0 00 1- DM 5 40		
PM 0.00 to PM 5.40		
Average Daily Traffic (ADT)	29,800	29.800
Truck ADT	13,708	13,708
Percent Truck Traffic in ADT	46	46
Level of Service (LOS)	F	С
PM 5.40 to PM 12.90		
Average Daily Traffic (ADT)	25,700	25.700
Truck ADT	10,023	10,023
Percent Truck Traffic in ADT	39	39
Level of Service (LOS)	F	В

Source: Caltrans District 8 Office of Forecasting, November 2007.

The Regional Model produced by SCAG generates ADT based upon socio-economic data received from all of the counties and cities within their jurisdiction. The traffic volumes and peak hour demand are derived from the number of households, population, and number of jobs in the region. The ADT is derived by iterative model runs designed to determine the shortest route for travelers in time and distance.

The build and no-build 2040 traffic volumes (ADT) for SR-58 would remain the same and would not vary due to the demand for that particular facility based on the several factors given below:

- 1). SR-58 traverses remote vicinity with very few homes or businesses. There is very little local traffic using the facility.
- 2). The traffic volumes are generated from long-distance and interstate travelers. SR-58 is essentially an extension of I-40 from Barstow to the Central Valley of California serving as an interstate facility.
- 3). A very substantial portion of the traffic (approximately 45%) on SR-58 consists of long-haul truckers that will travel the shortest distance whether SR-58 is two or four-lanes.

If a two-lane roadway is operating at LOS F some traffic may divert to other routes due to the delay. However, that two-lane roadway is the shortest path and the demand to use it still exists. Therefore the travel demand volume does not vary between the build and no-build alternatives. The build alternative with proposed increase in capacity will handle a greater volume of vehicles and provide a better Level of Service.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Facility is not an interchange or intersection.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Facility is not an interchange or intersection.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

Facility improvements are not anticipated to result in any traffic redistribution effects, as no practicable alternatives exist that run parallel to the project alignment. Facility improvements would relieve congestion when compared to the no-build alternative. LOS would improve from F to B/C during horizon year 2040.

Comments/Explanation/Details (attach additional sheets as necessary)

The proposed project is not a new highway/freeway. It is a realignment and widening project proposing to widen existing highway from 2 to 4 lanes. It is intended to improve traffic flow and reduce congestion and accommodate future traffic demand. The EPA's March 2006 guidance document <u>Transportation Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas</u> references two-step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes are diesel truck traffic volumes. With respect to traffic volumes along the project limits of SR-58, both opening year (2016) and horizon year (2040) AADT volumes are forecast to be below the above-mentioned screening-level threshold criteria of 125,000 total AADT traffic volumes. As such, the project does not have potential to result in a substantial number of diesel vehicles within the project area.

According to the Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (page 25), this project is not a project of air quality concern under 40 CFR 93.123(b)(1)(l) and (ii):

The project site is not in or affecting an area or location identified in any PM10 implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

The project site is located within the Mojave Desert Air Basin (MDAB), which is classified as attainment/unclassified for the PM2.5 national ambient air quality standard (NAAQS).